



M.C.

OB 60
#11

Kreisler 1092-KGB
001394us/JH/be

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : GERD HOBOM ET AL.
SERIAL NO. : 09/909,238
FILED : July 19, 2001
FOR : RECOMBINANT INFLUENZA VIRUSES WITH BICISTRONIC
vRNAs CODING FOR TWO GENES IN TANDEM
ARRANGEMENT
ART UNIT : 1614
EXAMINER : TO BE ASSIGNED

June 19, 2002

Hon. Commissioner of Patents
Washington, D.C. 20231

**RESPONSE TO NOTICE REGARDING
THE SEQUENCE LISTING**

SIR:

In response to the above-identified notice, a copy of which is attached, please amend the above-identified application as follows:

IN THE SEQUENCE LISTING:

Replace page 2 of the paper Sequence Listing by the attached replacement page 2.

REMARKS

The above-identified notice indicated a defect in the Location Feature of SEQ ID NO.: 7, and required that Applicants submit:

- 1) A substitute paper copy of the Sequence Listing;
- 2) A substitute computer readable form (CRF) copy of the paper Sequence Listing; and
- 3) A statement that the content of the paper Sequence Listing and the computer readable copies are the same and include no new matter.

In response, there is attached a substitute paper copy of the Sequence Listing, which is in the form of replacement page 2 of the Sequence Listing, and contains the correction in the Location Feature of SEQ ID NO.: 7. The undersigned hereby certifies that the substitute paper copy of the Sequence Listing, and, specifically, replacement page 2 does not introduce new matter.

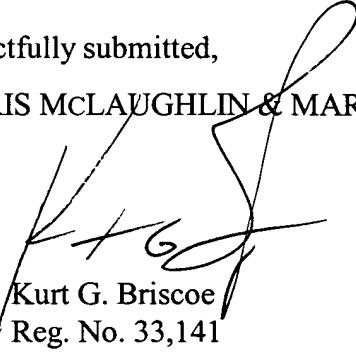
There is also attached a substitute computer readable form copy of the substitute paper Sequence Listing. The undersigned hereby certifies that the content of the substitute paper Sequence Listing and the substitute computer readable form copy is the same and includes no new matter.

Early and favorable action is earnestly solicited.

Respectfully submitted,

NORRIS MC LAUGHLIN & MARCUS, P.A.

By


Kurt G. Briscoe
Reg. No. 33,141

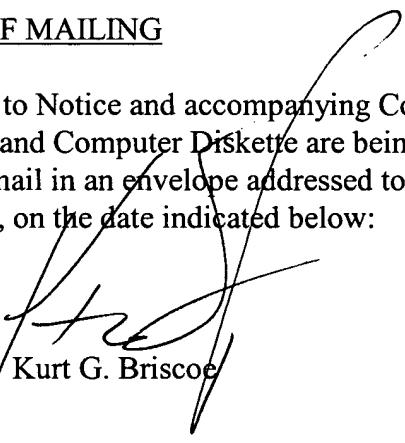
220 East 42nd Street - 30th Floor
New York, New York 10017
Phone: (212) 808-0700
Fax: (212) 808-0844

CERTIFICATE OF MAILING

I hereby certify that the foregoing Response to Notice and accompanying Copy of the Notice, Substitute Paper Sequence Listing (1 page) and Computer Diskette are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Hon. Commissioner of Patents, Washington, D.C. 20231, on the date indicated below:

Date: June 19, 2002

By


Kurt G. Briscoe

1010
05/0
2306

STIC
JUN 2 5 2002
EXAMINER
RAW SEQUENCE LISTING
ERROR REPORT

BIOTECHNOLOGY SYSTEMS BRANCH

ER 1600/2002

RECEIVED
MAR 19 2002

**RAW SEQUENCE LISTING
ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/909,238A
Source: 1600
Date Processed by STIC: 2-28-2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

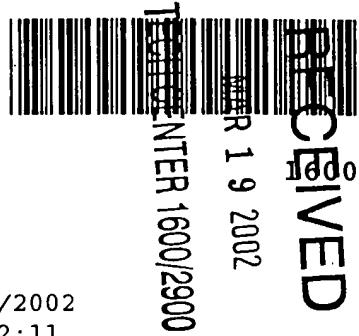
Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/909,238A

DATE: 03/12/2002
TIME: 11:52:11

Input Set : A:\PTO_MS.txt
Output Set: N:\CRF3\03122002\I909238A.raw

Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Gerd HOBOM
4 Anette MENKE
5 Sabine MEYER-ROGGE
7 <120> TITLE OF INVENTION: Recombinant Influenza Viruses with Bicistronic vRNAs Coding
for Two Genes
8 in
9 Tandem Arrangement
11 <130> FILE REFERENCE: 001394us/JH/ml
13 <140> CURRENT APPLICATION NUMBER: US/09/909,238A
14 <141> CURRENT FILING DATE: 2001-07-19
16 <160> NUMBER OF SEQ ID NOS: 24
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 12
22 <212> TYPE: RNA
23 <213> ORGANISM: Influenza A virus
25 <400> SEQUENCE: 1
26 ccugcuuuug cu 12
29 <210> SEQ ID NO: 2
30 <211> LENGTH: 12
31 <212> TYPE: RNA
32 <213> ORGANISM: Influenza B virus
34 <220> FEATURE:
35 <221> NAME/KEY: misc_feature
36 <222> LOCATION: (1)..(2)
37 <223> OTHER INFORMATION: n = any nucleotide
39 <400> SEQUENCE: 2
W--> 40 nnygcuucug cu 12
43 <210> SEQ ID NO: 3
44 <211> LENGTH: 12
45 <212> TYPE: RNA
46 <213> ORGANISM: Influenza C virus
48 <400> SEQUENCE: 3
49 ccugcucucug cu 12
52 <210> SEQ ID NO: 4
53 <211> LENGTH: 12
54 <212> TYPE: RNA
55 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
59 influenza A 3'-sequence (pHL1104 and pHL1920)
61 <400> SEQUENCE: 4
62 ccuguuucua cu 12
65 <210> SEQ ID NO: 5

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/909,238A

DATE: 03/12/2002

TIME: 11:52:11

Input Set : A:\PTO_MS.txt

Output Set: N:\CRF3\03122002\I909238A.raw

66 <211> LENGTH: 12
 67 <212> TYPE: RNA
 68 <213> ORGANISM: Artificial Sequence
 70 <220> FEATURE:
 71 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
 influenza A 3'-sequence (pHL1948)

74 <400> SEQUENCE: 5
 75 ccugguucuc cu 12
 78 <210> SEQ ID NO: 6
 79 <211> LENGTH: 13
 80 <212> TYPE: RNA
 81 <213> ORGANISM: Influenza A virus
 83 <400> SEQUENCE: 6
 84 aguagaaaca agg 13
 87 <210> SEQ ID NO: 7
 88 <211> LENGTH: 13
 89 <212> TYPE: RNA

90 <213> ORGANISM: Influenza B virus

92 <220> FEATURE:
 93 <221> NAME/KEY: misc_feature
 94 <222> LOCATION: (11)..(12) *range should include all 'n'*

95 <223> OTHER INFORMATION: n = any nucleotide

97 <400> SEQUENCE: 7

w--> 98 aguagwaaca rn~~h~~ *All 'n' must be included in the feature explanation.*

101 <210> SEQ ID NO: 8
 102 <211> LENGTH: 13
 103 <212> TYPE: RNA

104 <213> ORGANISM: Influenza C virus

106 <400> SEQUENCE: 8

107 agcaguagca agr 13

110 <210> SEQ ID NO: 9

111 <211> LENGTH: 13

112 <212> TYPE: RNA

113 <213> ORGANISM: Artificial Sequence

115 <220> FEATURE:

116 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
 influenza A 5'-sequence (pHL1920)

119 <400> SEQUENCE: 9

120 agaagaauc~~a~~ agg 13

123 <210> SEQ ID NO: 10

124 <211> LENGTH: 21

125 <212> TYPE: RNA

126 <213> ORGANISM: Influenza A virus

128 <220> FEATURE:

129 <221> NAME/KEY: misc_feature

130 <222> LOCATION: (14)..(16)

131 <223> OTHER INFORMATION: n = any nucleotide

133 <400> SEQUENCE: 10

w--> 134 aguagaaaca aggnnnuuuu u 21



RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/909,238A

DATE: 03/12/2002
TIME: 11:52:11

Input Set : A:\PTO_MS.txt
Output Set: N:\CRF3\03122002\I909238A.raw

137 <210> SEQ ID NO: 11
138 <211> LENGTH: 21
139 <212> TYPE: RNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
144 influenza A 5'-sequence (pHL1920)

146 <220> FEATURE:
147 <221> NAME/KEY: misc_feature
148 <222> LOCATION: (14)..(16)
149 <223> OTHER INFORMATION: n = any nucleotide
151 <400> SEQUENCE: 11

W--> 152 agaagaaauca aggnnnnnuuu u 21

155 <210> SEQ ID NO: 12
156 <211> LENGTH: 21
157 <212> TYPE: RNA
158 <213> ORGANISM: Influenza B virus
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <222> LOCATION: (12)..(16)
163 <223> OTHER INFORMATION: n = any nucleotide
165 <400> SEQUENCE: 12

W--> 166 aguagwaaca rnnnnnnnnuuu u 21

169 <210> SEQ ID NO: 13
170 <211> LENGTH: 19
171 <212> TYPE: RNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
176 influenza C 5'-sequence
178 <400> SEQUENCE: 13

179 aguaguaaca agrguuuuu 19
182 <210> SEQ ID NO: 14
183 <211> LENGTH: 15
184 <212> TYPE: RNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
189 influenza A 3'-sequence (pHL1104 and pHL1920)

191 <220> FEATURE:
192 <221> NAME/KEY: misc_feature
193 <222> LOCATION: (1)..(3)
194 <223> OTHER INFORMATION: n = any nucleotide
196 <400> SEQUENCE: 14

W--> 197 nnncucguuu cuacu 15

200 <210> SEQ ID NO: 15
201 <211> LENGTH: 15
202 <212> TYPE: RNA
203 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/909,238A

DATE: 03/12/2002

TIME: 11:52:11

Input Set : A:\PTO_MS.txt

Output Set: N:\CRF3\03122002\I909238A.raw

205 <220> FEATURE:
 206 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
 207 influenza A 3'-sequence (pHL1948)
 209 <220> FEATURE:
 210 <221> NAME/KEY: misc_feature
 211 <222> LOCATION: (1)..(3)
 212 <223> OTHER INFORMATION: n = any nucleotide
 214 <400> SEQUENCE: 15

W--> 215 nnncugguu cuccu 15

218 <210> SEQ ID NO: 16
 219 <211> LENGTH: 15
 220 <212> TYPE: RNA
 221 <213> ORGANISM: Artificial Sequence
 223 <220> FEATURE:
 224 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
 225 influenza B 3' sequence
 227 <220> FEATURE:
 228 <221> NAME/KEY: misc_feature
 229 <222> LOCATION: (1)..(5)
 230 <223> OTHER INFORMATION: n = any nucleotide
 232 <400> SEQUENCE: 16

W--> 233 nnnnnyguuu cuacu 15

236 <210> SEQ ID NO: 17
 237 <211> LENGTH: 14
 238 <212> TYPE: RNA
 239 <213> ORGANISM: Artificial Sequence
 241 <220> FEATURE:
 242 <223> OTHER INFORMATION: Description of Artificial Sequence: Modified
 243 influenza C 3'-sequence
 245 <400> SEQUENCE: 17

246 cccuguuuc uacu 14

249 <210> SEQ ID NO: 18

250 <211> LENGTH: 10

251 <212> TYPE: DNA

252 <213> ORGANISM: Influenza A virus

254 <400> SEQUENCE: 18

255 agttacgttc

10

258 <210> SEQ ID NO: 19

259 <211> LENGTH: 32

260 <212> TYPE: DNA

261 <213> ORGANISM: Influenza A virus

263 <400> SEQUENCE: 19

264 gctaaaaat gatcttcttg aaaattgcag gc

32

267 <210> SEQ ID NO: 20

268 <211> LENGTH: 3888

269 <212> TYPE: DNA

270 <213> ORGANISM: Artificial Sequence

272 <220> FEATURE:

273 <223> OTHER INFORMATION: Description of Artificial Sequence: pHL1920

RAW SEQUENCE LISTING · DATE: 03/12/2002
 PATENT APPLICATION: US/09/909,238A TIME: 11:52:11

Input Set : A:\PTO_MS.txt
 Output Set: N:\CRF3\03122002\I909238A.raw

275 <400> SEQUENCE: 20
 276 cccaaaaaaaaaaaaaaaag agtccagagt gccccgcgg ttccgcgcg 60
 277 gggggggggg gggggggggg cacttcggc catctggtc acctccagca tcggggaaa 120
 278 aaaaaaaaaac aaagttcgc cccgagtaact ggtcaccc cgaagttggg ggggagtaga 180
 279 aacagggtag ataatcactc actgagtgac atccacatcg cgacgcgcg taatacgact 240
 280 cactataggg cgaattgggt accgggcccc ccctcgaggt cgacggtatac gataagcttc 300
 281 gacgagattt tcaggagcta aggaagctaa aatggagaaa aaaatcactg gatataccac 360
 282 cgttgatata tcccaatggc atcgttaaaga acatttttag gcatttcagt cagttgctca 420
 283 atgtacctat aaccagaccg ttcagctgg tattacggcc tttttaaaga ccgtaaagaa 480
 284 aaataagcac aagttttatc cgccctttat tcacattctt gcccgcctga tgaatgctca 540
 285 tccggattc cgtatggcaa tggaaagacgg tgagctggg atatgggata gtgttcaccc 600
 286 ttgttacacc gtttccatg agcaaactga aacgtttca tcgctctgga gtgaatacca 660
 287 cgacgatttc cggcagttc tacacatata ttcgcaagat gtggcgtgtt acggtaaaaa 720
 288 cctggcctat ttccctaaag gttttagtta gaatatgttt ttcgtctca gcaatccctg 780
 289 ggtgagttc accagtttg atttaaacgt ggccaatatg gacaacttct tcgccccgt 840
 290 tttcaccatg ggcaaatatt atacgcaagg cgacaaggtg ctgatgccgc tggcgattca 900
 291 ggttcatcat gccgttgtg atggcttcca tgcgcaga atgcttaatg aattacaaca 960
 292 gtactgcgt gagtggcagg gccccggcgtt attttttaa ggcagttatt ggtgccctt 1020
 293 aacgcctggt gctacgcctg aataagtgtat aataagcggg tgaatggcag aaattcgtcg 1080
 294 aagcttgata tcgaatttctt gcaagccggg ggatccacta gttctagagc ggccgccacc 1140
 295 gcggtggagc tccagctttt gttcccttta gtcgggttta attgcgcgca ggcttagcta 1200
 296 ggttaaagaaa aataccctt atttttctaa taaccggcg gcccggaaatg ccgactcgga 1260
 297 gcgaaagata tacctcccc gggccgggg ggtcgctca ccgaccacgc cgccggccca 1320
 298 ggcgacgcgc gacacggaca cctgtccccca aaaacccac catcgccggc acacacggag 1380
 299 cgccccgggc cctctggta accccaggac acacggcggg gcaacggcgg gccggggacg 1440
 300 ccctccccggc cgccccgtgcc acacgcaggg ggcggcccg tgcgtccaga gcgggagccg 1500
 301 gaagcatttt cggccggccc ctcttacgac cgggacacac gagggaccga aggccggcca 1560
 302 ggcgcgaccc tctggccgc acgcgcgtc agggagcgct ctccgactcc gcacggggac 1620
 303 tcgccagaaa ggatcggtac ctgcattaaat gaatcagggg ataacgcagg aaagaacatg 1680
 304 tgagcaaaa gcccggaaac cgtaaaaagg ccgcgttgc ggcgttttc 1740
 305 cataggctcc gcccccttga cgagcatcac aaaaatcgac gctcaagtc gaggtggcga 1800
 306 aacccgacag gactataaag ataccaggcg ttcccccgtt gaaagctccct cgtgcgtct 1860
 307 cctgttccga ccctgcgtc taccggatac ctgcgtccct ttcccccgtt gggaaacgtg 1920
 308 ggcgtttctc atagctcactg ctgttaggtat ctgcgtccgg tgcgtccaaag 1980
 309 ctgggctgtg tgcacgaacc ccccggttca ggcacccgtt ggcgttccatc cggtaactat 2040
 310 cgtcttgagt ccaacccgtt aagacacgcac ttatgcgcac tggcagcagc cactggtaac 2100
 311 aggattagca gagcgggtt tgtagggcggt gctacagat tcttgcgtt gtcgttcaac 2160
 312 tacggctaca ctgcgttccaaatc gatattttgtt atctgcgtc tgctgcgttccatc 2220
 313 ggaaaaagag ttggtagctc ttgcgttccaaatc aacaaacca cccgttccatc cggtaactat 2280
 314 ttgttttgcg agcggcgtt tacgcgcaga aaaaaggat ctcaagaaga tccttgcgtt 2340
 315 ttgttttgcg ggtctgcgtt tcgttccaaatc gaaactcactt gtttgcgttccatc 2400
 316 agattatcaa aaaggatctt caccttagatc ttgcgttccaaatc aaaaatcgac gtcgttccatc 2460
 317 atctaaagta tatacgatc aacttgggtt gacaggatcc aatgcgttcaat cgtgaggca 2520
 318 cctatctcgtt cgtatctgtt atttcgttca tccatgtt ccgttccatc cgtgtgttag 2580
 319 ataactacga tacgggaggg ctaccatctt ggcggccgtt ctgcgttccatc accgcgttccatc 2640
 320 ccacgctcactc cggctccaga ttgcgttccaaatc ataaaccacg cggccggaaatc ggcgttccatc 2700
 321 agaagtggtc ctgcgttccaaatc atccgttca ttaattttgtt ccggaaatcgatc 2760
 322 agagtaagta gttcgccgtt taatgtttt cgcgttccatc tacaggcatc 2820
 323 gtgggtgtcac gtcgttccatc tggatgggtt tcatttcgtt ccgggttccatc acgtatcaagg 2880

VERIFICATION SUMMARY.

PATENT APPLICATION: US/09/909,238A

DATE: 03/12/2002

TIME: 11:52:12

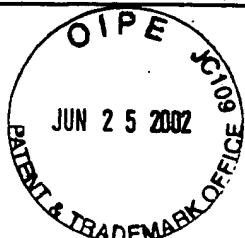
Input Set : A:\PTO_MS.txt

Output Set: N:\CRF3\03122002\I909238A.raw

L:40 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16



UNITED STATES PATENT AND TRADEMARK OFFICE



COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

ATTACHMENT TO "NOTICE TO COMPLY WITH REQUIREMENTS...SEQUENCE DISCLOSURES"

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be submitted using one of the following methods:

1. Electronically submitted through EFS-Bio
(<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual - ePAVE)
2. Mailed to:
U.S. Patent and Trademark Office
Box Sequence, P.O. Box 2327
Arlington, VA 22202
3. Mailed by Federal Express, United Parcel Service or other delivery service to:
U. S. Patent and Trademark Office
2011 South Clark Place
Customer Window, Box Sequence
Crystal Plaza Two, Lobby, Room 1B03
Arlington, Virginia 22202
4. Hand Carried directly to the Customer Window at:
2011 South Clark Place
Crystal Plaza Two, Lobby, Room 1B03, Box Sequence,
Arlington, Virginia 22202